



## NEXT MEETING - Weather Satellites

In spite of the weather-people sometimes coming to the wrong conclusions, e.g. the Oct. 1987 hurricane, the art of weather forecasting has improved considerably in the last decade mainly due to selective use of radio communications and space technology.

Discreetly placed geostationary satellites now provide continuous monitoring of the surface conditions surrounding the earth and the data transmitted from these "weather satellites" can be received by amateur meteorologists who are prepared to make the investment in equipment to interface with their home computer.

For our July Club Meeting we will welcome Richard Gedge to describe and demonstrate the various sources of weather information. The meeting will begin at 7:30pm on Tuesday 7th July, at the Marconi College, Arbour Lane, Chelmsford.

## DATES FOR YOUR DIARY

- 7 July CLUB MEETING - Satellite Weather Pictures.
- 19 July COLCHESTER RALLY - Highwoods Sports Centre.
- 2 Aug. R.S.G.B NATIONAL MOBILE RALLY - Woburn.
- 4 Aug. CLUB MEETING - WARC 92 - Les Berkley.
- 1 Sep. CLUB MEETING - Moonbounce - Pat, G3IOR.

## LAST MONTHS MEETING - G8DET & G0GJS

A most successful Constructors Competition was held on 2 June 92 with 9 entries submitted by 8 Members.

The aim of the evening was to encourage home construction of equipment for radio amateur application.

The Judges' formidable task was to select those who would walk away from the evening with a Prize for their efforts meeting the following criteria:-

Originality of design,  
Application of technology,  
Quality of workmanship,  
Safety.

G0BDS Brian submitted an extremely well documented account of his new Radio Shack. It was constructed to full house building standards as it was attached to the outside of his house. Notable detail included a false drainpipe to run coaxial cables up to the roof area above the new shack.

Awarded Special Project Prize.

G0IPU Chris introduced a cleverly produced video to show his entry; a device to rotate the 70cm & 2m aerials mounted on his tilt-over-mast from horizontal to vertical mode as required for the polarisation of the radio contact. The difference in signal strength was discussed and varied from 8 to 20dB, the reality was often the ability to receive a station or not!.

Awarded 2nd Prize.

G2HPF Harry produced a man sized Power Supply with battery back-up and Charger. Harry's PSU used a battery and many items purchased from CARS equipment recycling sales. It was used to run one of his rigs.

G4ICP Richard built and gave a working demonstration of the Radcom "White Rose" direct conversion receiver with plug-in crystal controlled converters for 20, 40 & 80 metres for a total cost of £10.00. It uses a tunable IF of 6 to 6.5MHz. All his PCB's were home produced and he used 75% of the components from the junk box.

Awarded 1st Prize.

G4FKH Gwyn entered 2 items. The first was a Ni-Cad Discharger using a car headlamp bulb. This is an important item for any rechargeable cell user; cells must be discharged and then fully charged to ensure long life.

His second item was a Magnetometer based on the "jam jar" design although Gwyn used the local library for his research to derive the circuits. A flashing LED alerts a magnetic change.

Awarded 3rd Prize.

G4VGS Denis submitted 3 versions of the Bencher Twin Paddle Key. One was constructed in perspex, another in brass and the third in a small mahogany box with a glass window in a style of a bygone era. All were demonstrated by Denis and tested by G4FKH. The 3 Keys were built to a very high standard of construction.

Awarded the Novice Prize.

(Judges note:- this prize is awarded to a successful entrant who has not previously won an Award)

G7KLV Geoff produced a Phase Locked Loop Frequency Synthesiser for 2m FM. A LED display indicated the channel number selected and will be part of a 2m receiver in the near future. It used CMOS, HS CMOS, LP Schottky and 6 transistors.

Awarded 3rd Prize.

G8AAE Phil made a Stabilised Power Supply which utilised a clever voltage doubler circuit to give another supply (-25volts) besides the 12volts at 1amp.

The Judges felt that the competition achieved the aim of encouraging home construction and an interesting evening was had by all.

## MEMBERS NEWS

The Society extends a welcome to Alistair Stewart, who hopes to apply for lapsed call sign G3ZKM.

We take the opportunity in this Newsletter to pass on our best wishes to Albert, G0AEH who is not in very good health at the present time.

## COMMITTEE MEETING

The July Committee meeting will be held in the Telford Lodge at 7.30pm on Wednesday 15th July, you are welcome to join us.

## DF NEWS - Dick, G3WHR

For our second local event, Andrew, G4KQE borrowed my transmitter. The start bearing went towards Ulting so everybody set out for Maldon. I took my second bearing from Heybridge, only to find that the cross was well off the map - probably in Danbury. However the second bearing passed through Woodhan Walter and that area called appropriately - the Wilderness.

Another bearing confirmed that it was the wilderness, but when I arrived in the village there were DF cars at the end of every footpath leading to the wood.

Two smiling faces greeted me before I had sight of the aerial, and the smiles became broader as they watched me fight my way to the wrong end of it. My DF set would not give me a null towards the TX so I resorted to following footprints, these soon led me to Andrew. The remaining teams were hard on my heels.

The light may have gone but it was still a warm evening, so we enjoyed our first outdoor pint while studying maps, bearings and results.

### Results

1 Mike Hawkins	8.16
2 Philip Cunningham	8.17
3 Dick Brocks	8.27
4 Peter Graves	8.30
5 Richard Witney	8.31

Future Event. 5th July RSGB Rippon.

## NFD 1992 - Gwyn G4FKH

This year we were at the new site of Howletts Hall Farm, and the call for volunteers to turn up early was taken literally. By 8:15am sufficient people were on site for the setting up procedure to begin. Everyone who turned up is to be congratulated for a most excellent job, well done; this includes the valuable help from our new members, how nice to see you, sorry about all that mud!

The working party split into two groups, one to erect the Telomast, the other to help Arthur, G3KPJ, sling his arrows over the trees. By the lunch break at 1pm the vast majority of the aerials were up and ready. Lunch was consumed under the shade of a nearby Oak because of heat of the sun!. Resuming, we finished erecting the aerials and began to tune them, Dick, G3WHR, had made separate ATU's for each band, this worked excellently and meant that we did not need to trim any wires. On starting the generator we noticed that one bulb over the operating position was not working. Dick said, "has anyone got a decent battery" and I said, "yes I have one of those Ni-Cad's recently sold at the club". Dick then proceeded to put the bulb contacts across the battery and spot weld the filament by jiggling the bulb a little, it worked after about three tries\*. By then, the rig was ready for use and we were on the air by 2.30pm.

Band conditions were very good indeed, all were open to Europe. We started off on 10M (for the double points), we had other excursions on this band as well.

All the other bands were exploited during the 24 hours. The operators and loggers did a very good job bringing in a total of 672 QSO's, the logs now require checking and the final points total calculated.

We did have one worrying moment on Sunday afternoon though, to my surprise everyone used my keyer and consequently the battery went flat battery just after 1pm. I blame it on the \* above (just joking Dick).

Of course we didn't have so much as a spare straight key on site, so Charles dispatched himself home to get one. In the meantime Dick arrived back on site and of course he had a replacement. Charles was not very happy when he arrived back on site. We were of course working them like they were going out of fashion, much to Charles' chagrin.

NOTE:- In committee it has been decided that because the event went so well, a de-briefing session will not be necessary this time

## CHELMSFORD AND COLCHESTER SWEEP THE BOARD - Andrew, G4KQE

We recently had a very enjoyable long weekend down in South Devon, taking in such attractions as the Dart Valley Steam Railway and Dartmoor, but the main reason was to take part in the Torbay Qualifying DF event.

About twelve teams assembled at the start between Paington and Brixham, overlooking Tor Bay and across to Torquay. One of the start bearings went inland, but the other stronger bearing went out across the bay, and when we sighted along the axis of the DF set ferrite rod, it just clipped the edge of the Torquay peninsular, at a place called Hopes Nose. It was therefore fairly obvious where one station was, and it must be the only time in DF history where you can actually see where the hidden station is at the start, albeit 4½ miles across the Bay!

We decided to head for that station first and after weaving our way through Torquay, confirmed the position on the two o'clock bearing. We arrived 'on site', only to find Dick Brocks already there, but then the fun began. The TX site was on a steep slope down to the sea on the edge of a very thick blackthorn thicket. The cunning organiser (Paul Clark!) had used a balanced aerial from the TX, terminating each leg in an earth stake in the middle of the blackthorn thicket. This meant that the TX did not radiate much, but the earth stakes certainly did! After much bush beating and noting a distinct lack of Messrs Brocks and Graves, Daphne finally found the TX at 2.47pm a good ½ hour after I walked past him.

We then set off to the other station, near Newton Abbot. More Paul Clark special aerials! We found the wood fairly quickly, but just could not find the TX, the DF set was totally confused with so much wire up for aerial.

We finally found the TX at 4.30 after nearly 45 minutes of bush beating in a steeply sloping wood, growing copious amounts of wild garlic

The tea was served in S.T.C's Social Club in Paington - chicken salad, followed by scones, Devon cream and strawberry jam.

Then the results were announced, Andy Collett had won a couple of minutes ahead of Dick Brocks, who was second. Both therefore qualified for the National Final. Yours truly came in 10th, we still got a prize though - the ladies prize, awarded to the first lady in any team to finish.

After Andy's - Dick's accounts of how they did it, our table collected all the prizes, Wine for Andy, Beer for Dick and Chocolates for Daphne, Chelmsford had swept the board!

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73 from Roy & Ela Martyr, G3PMX & G6HKM

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